350/81 PUBL 359/394 FEB 1972

EDP SCANNING MICROSCOPE

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• **Photometric accuracy**— the sample moves through a fixed, paraxial microphotometer system with conjugate field and sampling slits . . . providing both uniform, vignetting-free response over the whole scanned field and freedom from flare light.

• **Photogrammetric accuracy** — on-axis imaging of all points on the specimen results in a completely flat, distortion-free field.

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PHOTOMETRICS, INC.
442 MARRETT RD., LEXINGTON, MASS. 02173 • (617) 862-8050

SPECIFICATIONS

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Model	Magnifications	Scanning Apertures
Basic	1, 2, 3, 4, 5, 10 20, 30, 40, 50X	25 - 400μ Circular
High Mag. Magnification	1, 2, 3, 5, 10, 20 30, 50, 100, 200X	2 - 400μ Circular

INPUT

- Photographic film (up to 50 ft. rolls of 35 mm), microscope slides, glass plates or other light-transmitting samples. Scanning area covers full 70 mm square format.
- Density range adjustable from 0.3D to 3.0D, between 0 and 4.0D.

OUTPUT

- 8 inch diameter facsimile writeout, 256 lines/inch, in 10 minutes.
- 16 equidensity contours, with equal interval adjustable continuously down to 0.02D.
- Positive or negative continuous tone printout with adjustable edge enhancement controls.
- Density accuracy 0.5 contour interval.
- Position accuracy 0.5 mm/magnification.
- One-dimensional scanning capability. Jack for immediate coupling to external chart recorder.
- Direct coupling of density readings to hard-wired peripheral data reduction equipment for RMS measurements (for rapid determination of film granularity), frequency analysis (for measuring power spectra), and pulse height analysis (for area-density integration or histograms).
- Digital data recording and manipulation with direct computer/tape coupling.

OPTICAL SYSTEM

- 100 watt, Koehler illumination. Spatially stationary optical chain, as used in standard microdensitometers.
- Field slit and final scanning aperture dimensions both adjustable.

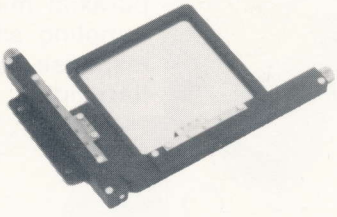
Basic Model (fixed focus as shown above) $11,900
With High Magnification Modification 12,550*

COMPUTER COUPLING and DIGITAL RECORDING

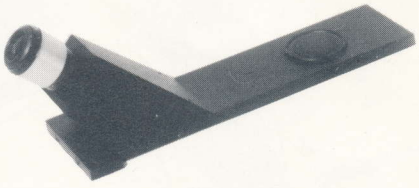
Interface to minicomputer for

- On-line data processing, such as density-area measurements.
- Digital recording with 8 bit accuracy for subsequent data analysis. Up to 3 million data points in 10 minutes. (Prices on request)

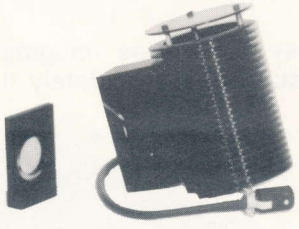
OFF THE SHELF ACCESSORIES



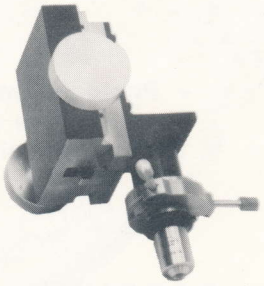
Supplementary x-y Stage. For micro-manipulation of films up to 70 mm square. $300



*Previewing Assembly with Pelicle Beam Splitter.Parfocal with Final Scanning Aperture. Recommended for High Mag. Modification. $450



Epillumination Reflection Attachment with Pelicle Beam Splitter. Used for Scanning opaque samples. $800



*Rack and Pinion Focusing Mounts with x-y Adjustable Nose Piece. Recommended for Both Objective and Condenser on High Mag. Modification. $900/Pr.

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Printed in U.S.A.

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FREDERICK G. PARSONS
VICE PRESIDENT-MARKETING

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Dear Sirs:

It takes just 10 minutes to sample 3 million data points and to produce a magnified, 8 inch diameter contour map of a specimen – with spatial resolution to 1 micron, and density discrimination to 0.02 density units. At minimum cost, the instrument also can be interfaced directly to your hard wired peripheral data processor, minicomputer, or tape system for on-line image processing or IBM compatible digital recording. A flat bed specimen stage, with viewing area to accommodate a full 70 mm format, accepts roll film, microscope slides, or glass plates up to 5 inches square.

Many of today's scanners, in an effort to achieve high speed, suffer from flare light and non-uniform response over the scanned area. To avoid these deficiences, the EDP Scanning Microscope uses a fixed microdensitometer optical system through which the specimen stage moves in a smooth, continuous spiral raster. Thus stationary response is achieved over the full scanned area, with speeds limited only by the photon limit of the photomultiplier detector. Conjugate field and final scanning apertures minimize flare light, thus assuring photometric accuracy and allowing detection of structure unseen by full field illumination.

Photometric and geometric fidelity, high speed, and a price starting at $11,900, can make the EDP Scanning Microscope the most cost effective and versatile microdensitometric scanner for your applications in photographic photometry, radiography, microscopy and many other forms of image analysis.

We invite you at no obligation to send us sample photographs, radiographs, microscope slides, or other specimens. We shall scan the material and return both the original samples and the density contour plots promptly for your evaluation.

Sincerely,

Frederick G. Parsons

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